

552,025

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number  
**WO 2004/088495 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 3/033**

Apfelgarten 11, 30539 Hannover (DE). **ADOLPH, Dirk**  
[DE/DE]; Wallbrink 2, 30952 Ronnenberg (DE).

(21) International Application Number:

PCT/EP2004/002997

(74) Agent: **RITTNER, Karsten**; Deutsche Thomson-Brandt  
GmbH, European Patent Operations, Karl-Wiechert-Allee  
74, 30625 Hannover (DE).

(22) International Filing Date: 22 March 2004 (22.03.2004)

(25) Filing Language: English

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(26) Publication Language: English

(30) Priority Data:  
03007665.7 3 April 2003 (03.04.2003) EP

(71) Applicant (for all designated States except US): **THOM-  
SON LICENSING S.A.** [FR/FR]; 46, quai A. le Gallo,  
F-92100 Boulogne-Billancourt (FR).

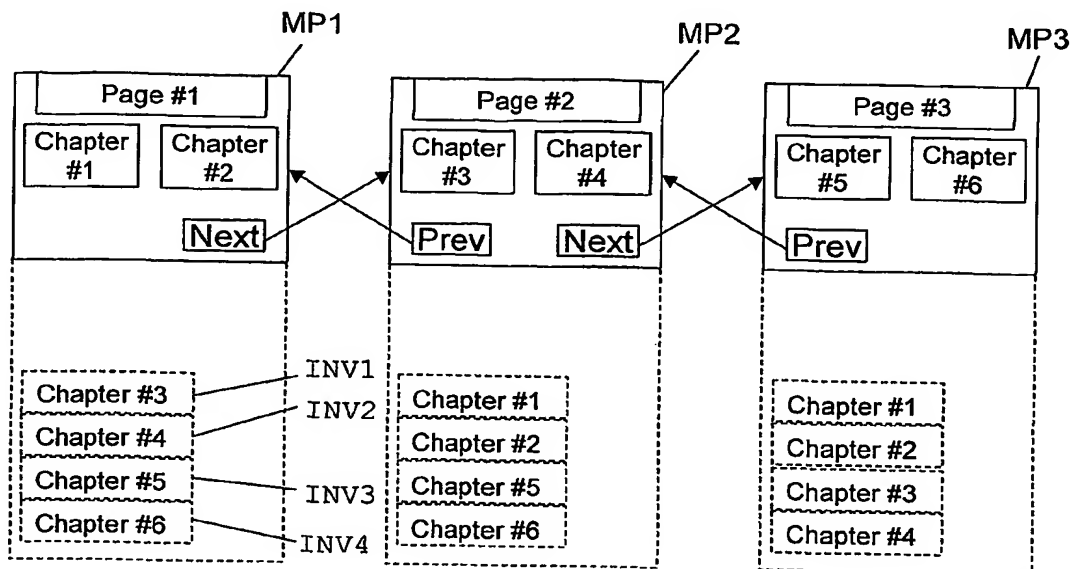
(72) Inventors; and

(75) Inventors/Applicants (for US only): **HÖRENTRUP,**  
Jobst [DE/DE]; Gabelsbergerstr. 18, 30163 Hannover  
(DE). **OSTERMANN, Ralf** [DE/DE]; Oberstr. 17,  
30167 Hannover (DE). **SCHILLER, Harald** [DE/DE];

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: METHOD FOR PRESENTING MENU BUTTONS



(57) Abstract: Optical storage media often contain data structures for a menu suitable for selection of a title, a chapter, a parameter or others. Such menus usually comprise a number of buttons (BO) to be displayed, with each button having a state. Possible states of buttons are e.g. "unselected", "selected" or "activated". According to the invention, the menu may contain buttons (INV1, ..., INV4) that can be selected through the keys on the remote control, but that don't have any images or text associated. This allows creating "invisible buttons" that automatically execute commands upon selection. Further, a sound or sound sequence, e.g. melody or click, may be associated to a buttons state, and may be played back when the button enters this state. Such menu data may be stored e.g. on a Blu-ray disc.

WO 2004/088495 A2



GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *without international search report and to be republished upon receipt of that report*